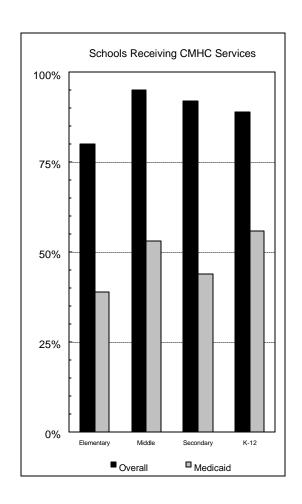
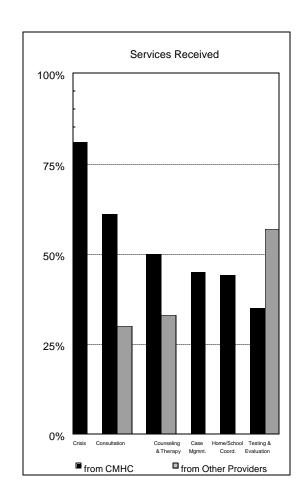
# MENTAL HEALTH SERVICES IN VERMONT SCHOOLS 1996-97

#### **Technical Report**





John A. Pandiani, Ph.D. Chief of Statistics and Research

Brad James, M.S. Research and Statistics Specialist

Vermont Department of Developmental and Mental Health Services 103 South Main Street, Waterbury, Vermont 05761-1601 (802) 241-2639 johnpa@dmh.state.vt.us brad@dmh.state.vt.us

SEPTEMBER 2, 1997

#### INTRODUCTION

The 1996-97 study, *Mental Health Services in Vermont Schools* was designed to provide an overview of mental health services in Vermont schools. The study collected information on the need for mental health services, those mental health services currently received, unmet needs for mental health services, and school satisfaction with the services provided by community mental health services.

Specific sections of the report focus on the treated prevalence of emotional and behavioral disorders in Vermont schools, mental health services currently received by schools from community mental health centers and other providers, and satisfaction with community mental health services overall and with specific service categories. In addition, the effect of the distance between schools and community mental health centers on availability, satisfaction, and need is assessed. The effect of the relative wealth of schools as measured by per pupil expenditures on those same factors is also explored.

Part I of this report is a narrative summary of the study describing the major findings. In many cases, differences in responses among types of schools are described.

Part II consists of twelve tables that present detailed analysis of survey results. These tables include overall results as well as breakdowns of results for four types of schools and the ten community mental health service areas. Each table includes footnotes designed to provide the reader with definitions of the terms used.

Three appendices provide technical and methodological details on the procedures used in *Mental Health Services in Vermont Schools*, 1996-97. Appendix 1 provides a brief discussion of statistical interpretation in small studies as well as providing a simple method for distinguishing between statistically significant and insignificant results in the tables. Appendix 2 presents a technical overview of the study as well as more detailed specifications of the methodology for each of the tables. Appendix 3 includes copies of the questionnaire and cover letters.

#### **TABLE OF CONTENTS**

Introduction		i
Treated P Mental He	e Rates Prevalence of Emotional and Behavioral Disordersealth Services in Schools	1 2
	on with Community Mental Health Centers Services	
	between Schools and Community Mental Health Centers Expenditures	
Part II: Tables		
Table 1:	Responses to the 1996-97 Study of Mental Health Services	5
Table 1:	Treated Prevalence of an Emotional or Behavioral Disorder	
Table 3:	Source of Mental Health Services	
Table 4:	Services Received from Community Mental Health Centers	
Table 5:	Services Received from Other Providers	
Table 6:	Most Commonly Identified Providers of non-CMHC	
	Services Received	10
Table 7:	Satisfaction with Services Received from Community	
	Mental Health Centers	11
Table 8:	Services Wanted from Community Mental Health Centers	12
Table 9:	Topics of Importance to School Personnel	13
Table 10:	Likes and Dislikes of School Personnel	14
Table 11:	Effect of Distance between Schools and Community	
	Mental Health Centers	
Table 12:	Effect of Per Pupil Expenditures	16
Appendix 1		
A Note or	Statistical Interpretation	17
Appendix 2		
	ions and Notes on the Tables	19
Appendix 3		
Cover Let	ters and Questionnaire	26

#### **RESPONSE RATES**

Completed questionnaires were received from 252 schools, 77% of Vermont's 329 elementary, middle, secondary, and K-12 schools. (Table 1)

Elementary and middle schools had the highest response rates (79% and 76%, respectively). Secondary and K-12 schools responded to the questionnaire at slightly lower rates (68% and 64%, respectively).

### TREATED PREVALENCE OF EMOTIONAL AND BEHAVIORAL DISORDERS

More than 3,700 students received services for an emotional or behavioral disorder (EBD) during the 1996-97 school year at schools that responded to those questions (5.6% of all students). Almost 3% of all students were on an Individualized Education Plan (IEP) for an EBD; another 3% of students received instructional support because of an emotional or behavioral disorder. (Table 2)

Secondary and K-12 schools reported the most students receiving any EBD support (7.1% and 6.9%, respectively) followed by elementary schools (5.2%). Middle schools reported the lowest frequency of students receiving support for emotional or behavioral disorders (4.4%).

Secondary schools reported the greatest proportion of students on an IEP for an emotional or behavioral disorder. K-12 and middle schools followed with rates of 3.4% and 2.8%, respectively. Elementary schools reported the lowest proportion of students on an EBD based IEP (1.9%).

K-12 and elementary schools reported the highest proportion of non-IEP students receiving instructional support for EBD (3.5% and 3.3%, respectively). Secondary schools reported a 2.5% rate of non-IEP students receiving support for an EBD while middle schools reported the lowest rate (1.6%).

Ritalin was reported as being used by 2.7% of the students at schools responding to the question. Ritalin is a drug that may improve the behavior of children with attention deficit/hyperactivity disorder. Middle and K-12 schools had the largest usage rates (3.5% and 3.4%, respectively) closely followed by elementary schools (2.9%). Secondary schools reported substantially lower rates of Ritalin usage than any other school type (1.7%).

#### MENTAL HEALTH SERVICES IN SCHOOLS

#### **Source of Mental Health Services**

Almost all schools (95%) reported receiving mental health services - 83% received mental health services from a community mental health center (CMHC) and 79% received services from other providers. (Table 3)

Elementary schools were the least likely to receive services from a CMHC (80% versus 89% of K-12 schools, 92% of secondary schools, and 95% of middle schools).

Elementary and K-12 schools were less likely to receive services from other providers (78% each, versus 83% of secondary schools and 89% of middle schools).

Approximately 40% of all schools received Medicaid funded CMHC mental health services.

Elementary schools were the least likely to receive Medicaid funded services (39% versus 44% of secondary schools, 53% of middle schools, and 56% of K-12 schools).

#### **Services Received from Community Mental Health Centers**

Among schools that reported receiving CMHC services, crisis services were the most frequently used (81%) followed by consultation services (61%), counseling (50%), case management (45%), home/school coordination (44%), and testing and evaluation (35%). (Table 4)

Elementary schools were less likely than other schools to receive crisis services, counseling, and case management.

Elementary and middle schools were more likely than other schools to receive testing and evaluation services from their CMHC.

#### **Services Received from Other Providers**

Among schools that reported receiving services from non-CMHC providers, testing and evaluation services were the most frequently used (57%) followed by counseling and therapy (33%), consultation (30%), and behavior management (15%). (Table 5)

The most commonly identified providers of non-CMHC services were private psychologists (73%), private psychiatrists and school district employees (9% each), followed by private therapists (8%). (Table 6)

#### SATISFACTION WITH COMMUNITY MENTAL HEALTH CENTER SERVICES

Overall, 72% of the schools that received CMHC services would recommend those services to another school in their district. (Table 7)

Middle schools were the most likely to recommend CMHC services (94%), followed by elementary schools (72%), secondary schools (66%), and K-12 schools (43%).

There was very little variation in levels of satisfaction with specific services received.

#### **Services Wanted from Community Mental Health Centers**

Of the 26 schools that reported receiving no CMHC services, 73% expressed a desire to receive one or more of the available services. (Table 8)

Crisis services were the most wanted by all schools (63%), followed by home/school coordination (56%), consultation (53%), and counseling (50%). Case management and testing and evaluation were less often wanted (37% and 30%, respectively).

#### **Topics of Importance to School Personnel**

The availability and quality of services were the topics most often mentioned when school personnel were asked about their likes and dislikes regarding CMHC services (75% and 72%, respectively). Financing and the location of services were mentioned much less often (21% and 17%, respectively). (Table 9)

Location of services and quality of services were the subject of many more favorable than unfavorable comments (59% versus 36% and 77% versus 63%, respectively). Financing of services, in contrast, was the subject of more unfavorable than favorable comments (52% versus 37%). (Table 10)

### DISTANCE BETWEEN SCHOOLS AND COMMUNITY MENTAL HEALTH CENTERS

Schools that were located more than 15 miles from the regional CMHC were less likely to receive mental health services than were schools less than 10 miles removed or those between 10 and 15 miles from the regional CMHC (88% versus 96% and 99%, respectively). (Table 11)

The more distant schools were less likely to receive services from a CMHC (69% versus 88% and 84%, respectively) and were also less likely to receive mental health services from other providers (69% versus 80% and 85%, respectively).

Schools that were farthest away from a regional CMHC were significantly more likely to want CMHC services than closer schools: 83% of the most distant schools that did not currently receive CMHC services reported wanting those services as compared to 63% and 67% of the closer schools that did not currently receive services.

The most distant of schools among those that did receive CMHC services reported the highest levels of satisfaction with services (82% versus 69% and 70%, respectively).

#### PER PUPIL EXPENDITURES

Schools with the highest per pupil expenditures were less likely to report receiving mental health services than those schools with lower per pupil expenditures. (Table 12)

Less than 90% of the schools with per pupil expenditures greater than \$6,000 reported receiving mental health services from any source as compared to 98% of schools with expenditures less than \$4,600 per pupil and 96% of schools between \$4,600 and \$6,000.

The schools with the highest per pupil expenditures were less likely to receive services from a CMHC (71% versus 87% and 85%, respectively) as well as being less likely to receive services from other providers (73% versus 85% and 80%, respectively).

Table 1
Responses to the 1996-97
Study of Mental Health Services
in Vermont Schools

		Respon	se Rate		Persor	nel Involv	ed in Com	npleting Q	uestionn	aires: 2, 3	
	Number	Number	Percent			Guid	lance	Spe	ecial		
	of Schools	Responding	R <u>esponding</u> <sup>1</sup>	Prin	cipal	Cour	nselor	Edu	cator	Ot	her
<u>Total</u>	329	252	77%	118	47%	127	50%	61	24%	50	20%
School Type											
Elementary	239	188	79%	96	51%	91	48%	42	22%	32	17%
Middle	25	19	76%	6	32%	12	63%	4	21%	4	21%
Secondary	54	36	67%	13	36%	19	53%	13	36%	12	33%
K-12	15	9	60%	3	33%	5	56%	2	22%	2	22%
Service Area											
Addison	20	16	80%	9	56%	9	56%	2	13%	0	
Bennington	22	18	82%	12	67%	7	39%	5	28%	5	28%
Chittenden	51	35	69%	10	29%	24	69%	5	14%	6	17%
Franklin/Grand Is	sl 26	18	69%	7	39%	10	56%	2	11%	1	6%
Lamoille	14	9	64%	3	33%	6	67%	2	22%	1	11%
Northeast	52	43	83%	23	53%	17	40%	11	26%	10	23%
Orange	31	22	71%	8	36%	12	55%	7	32%	6	27%
Rutland	31	24	77%	11	46%	13	54%	7	29%	6	25%
Southeast	57	44	77%	27	61%	21	48%	12	27%	11	25%
Washington	35	23	66%	8	35%	8	35%	8	35%	4	17%

<sup>1</sup> Percent Responding is the number of schools responding to the survey divided by the number of schools in Vermont in total, by school type, and service area.

<sup>&</sup>lt;sup>2</sup> Percents for 'Personnel Involved in Completing Questionnaires' are are based on the number of respondents in each category divided by the number responding in total, by school type, and service area. Percents do not sum to 100% as many questionnaires were completed by two or more people.

<sup>&</sup>lt;sup>3</sup> Two completed questionnaires did not identify the completing individual.

Table 2
Treated Prevalence of an Emotional or Behavioral Disorder in Vermont Schools, 1996-97

		Students I	Receiving Sup	port for Emo	otional or E	Behaviora	I Disorders		Pr	evalence of F	Ritalin Usage	4
	Total Schools <sup>1</sup>	Total Students <sup>1</sup>	Students Any EBD	Receiving Services <sup>2</sup>		s on an	Non-IEP Receivii Instructiona	ng EBD	Total Schools	Total Students	Students to Take	
<u>Total</u>	218	66,097	3,732	5.6%	1,777	2.7%	1,955	3.0%	233	72,321	1,933	2.7%
School Type												
Elementary	167	39,811	2,076	5.2%	744	1.9%	1,332	3.3%	178	42,370	1,213	2.9%
Middle	16	7,521	334	4.4%	214	2.8%	120	1.6%	17	8,702	305	3.5%
Secondary	27	16,122	1,140	7.1%	730	4.5%	410	2.5%	30	18,606	325	1.7%
K-12	8	2,643	182	6.9%	89	3.4%	93	3.5%	8	2,643	90	3.4%
Service Area												
Addison	14	3,520	324	9.2%	176	5.0%	148	4.2%	13	3,175	71	2.2%
Bennington	13	3,318	273	8.2%	111	3.3%	162	4.9%	14	3,583	67	1.9%
Chittenden	32	13,729	730	5.3%	331	2.4%	399	2.9%	34	14,843	401	2.7%
Franklin/Grand Isle	16	6,775	430	6.3%	226	3.3%	204	3.0%	18	8,000	175	2.2%
Lamoille	8	1,987	134	6.7%	62	3.1%	72	3.6%	9	2,372	71	3.0%
Northeast	39	10,272	616	6.0%	318	3.1%	298	2.9%	40	9,927	274	2.8%
Orange	21	5,159	277	5.4%	136	2.6%	141	2.7%	21	4,953	129	2.6%
Rutland	20	5,866	268	4.6%	130	2.2%	138	2.4%	23	6,869	253	3.7%
Southeast	36	9,683	467	4.8%	194	2.0%	273	2.8%	40	11,546	319	2.8%
Washington	19	5,788	213	3.7%	93	1.6%	120	2.1%	21	7,053	173	2.5%

<sup>&</sup>lt;sup>1</sup> The 218 schools and the attendant student total represent those schools answering both questions regarding the number of EBD students (either on an IEP or receiving instructional support for EBD) and giving enrollment figures.

<sup>&</sup>lt;sup>2</sup> 'Students Receiving Any EBD Services' reflects the reported numbers of students from the 218 schools answering both questions regarding EBD services. Percents are based on reported enrollment figures in total, by school type, and by service area for the schools responding to both questions.

<sup>&</sup>lt;sup>3</sup> Percents are based on the total number of students in the 218 schools responding to both questions concerning EBD.

<sup>&</sup>lt;sup>4</sup> Totals are based on the number of schools reporting students using Ritalin. Percents are based on the total populations of the 233 reporting schools.

Table 3
Source of Mental Health Services in Vermont Schools, 1996-97

				Schoo	ls Receivin	g CMHC	Services	3				
	Mental	ing Any Health ces <sup>1,2</sup>		MHC ces <sup>2,3</sup>	Noncor R <u>elatio</u>	ntractual onship <sup>2</sup>	Med	ractual licaid ces <sup>2,4</sup>	Pro	CMHC vider ices <sup>2</sup>	and nor	CMHC n-CMHC Services <sup>2,5</sup>
<u>Total</u>	240	95%	209	83%	105	42%	104	41%	200	79%	169	67%
School Type												
Elementary	177	94%	150	80%	77	41%	73	39%	146	78%	119	63%
Middle	18	95%	18	95%	8	42%	10	53%	17	89%	17	89%
Secondary	36	###	33	92%	17	47%	16	44%	30	83%	27	75%
K-12	9	###	8	89%	3	33%	5	56%	7	78%	6	67%
Service Area												
Addison	15	94%	14	88%	9	56%	5	31%	13	81%	12	75%
Bennington	17	94%	17	94%	3	17%	14	78%	13	72%	13	72%
Chittenden	34	97%	27	77%	19	54%	8	23%	30	86%	23	66%
Franklin/Grand I	sle 18	###	18	###	7	39%	11	61%	13	72%	13	72%
Lamoille	9	###	6	67%	5	56%	1	11%	9	###	6	67%
Northeast	39	91%	35	81%	22	51%	13	30%	27	63%	23	53%
Orange	22	###	20	91%	4	18%	16	73%	21	95%	19	86%
Rutland	23	96%	20	83%	15	63%	5	21%	19	79%	16	67%
Southeast	41	93%	38	86%	13	30%	25	57%	35	80%	32	73%
Washington	22	96%	14	61%	8	35%	6	26%	20	87%	12	52%

<sup>&</sup>lt;sup>1</sup> Numbers for 'Receiving AnyMental Health Services' are based on those schools answering 'Yes' to a relationship with their CMHC (either contractual or informal) or those receiving services from non-CMHC providers.

<sup>&</sup>lt;sup>2</sup> Percents are based on the number of schools that responded to the survey in total (n = 252), by school type and service area (Table 1).

 $<sup>^{\</sup>rm 3}$  Schools responding 'Yes' to either a contractual or informal CMHC relationship.

<sup>&</sup>lt;sup>4</sup> Schools responding 'Yes' to receiving CMHC provided contractual Medicaid services.

 $<sup>^{\</sup>rm 5}$  Schools responding 'Yes' to receiving both CMHC and non-CMHC provided services.

Table 4
Services Received from Community Mental Health Centers
by Vermont Schools, 1996-97

Specific Services Received <sup>2</sup> Home/School Case Testing & Receiving Any CMHC Services 1 Crisis Service Consultation Coordination Evaluation Counseling Management Total 208 83% 168 81% 127 61% 103 50% 91 44% 94 45% 73 35% School Type Elementary 149 79% 113 76% 91 61% 69 46% 65 44% 60 40% 54 36% Middle 18 95% 16 89% 11 61% 11 61% 7 39% 11 61% 8 44% 97% 52% 30% Secondary 33 92% 32 20 61% 19 58% 15 45% 17 10 K-12 8 89% 7 88% 5 63% 50% 4 50% 6 75% 1 13% Service Area Addison 15 94% 13 87% 10 67% 27% 9 60% 8 53% 8 53% Bennington 67% 60% 27% 15 83% 13 87% 10 9 9 60% 4 27% Chittenden 29 83% 27 93% 9 31% 10 34% 12 41% 10 34% 3 10% Franklin/Grand Isl 56% 50% 6 18 100% 15 83% 10 12 67% 9 33% 33% Lamoille 6 100% 50% 3 50% 3 50% 0 3 50% 67% 6 3 Northeast 35 81% 27 77% 27 77% 18 51% 40% 60% 14 40% Orange 17 77% 10 59% 10 59% 65% 7 41% 65% 5 29% 11 11 Rutland 92% 17 77% 16 73% 23% 14% 32% 6 27% Southeast 84% 76% 70% 70% 62% 54% 37 28 26 26 18 49% 23 20 Washington 14 61% 12 86% 6 43% 5 36% 50% 29% 4 29%

<sup>&</sup>lt;sup>1</sup> Percents are based on the number of schools that responded to the survey in total (n = 252), or by school type or service area (Table 1).

<sup>&</sup>lt;sup>2</sup> Percents are based on the number of schools (either total, school type, or service area) receiving any services from their CMHC (n = 208).

Table 5
Services Received from Other Providers
by Vermont Schools, 1996-97

	Schools Reporting	Iden	nools tifying			ly Reported		eceived fro	om non-C		
	non-CMHC		CMHC 2.3		ing and		seling	0			avior
	Providers <sup>1</sup>	Servi	ces 2, 3	Eval	uation	and I	herapy	Const	ultation	Mana	gement
<u>Total</u>	200	98	49%	56	57%	32	33%	29	30%	15	15%
School Type											
Elementary	146	78	53%	41	53%	26	33%	22	28%	15	19%
Middle	17	6	35%	4	67%	1	17%	4	67%	0	
Secondary	30	12	40%	8	67%	6	50%	2	17%	0	
K-12	7	3	43%	3	####	0		1	33%	0	
Service Area											
Addison	13	6	46%	3	50%	1	17%	1	17%	1	17%
Bennington	13	5	38%	2	40%	2	40%	2	40%	0	
Chittenden	30	18	60%	11	61%	7	39%	9	50%	1	6%
Franklin/Grand Isle	13	9	69%	7	78%	4	44%	2	22%	2	22%
Lamoille	9	8	89%	4	50%	4	50%	1	13%	1	13%
Northeast	27	13	48%	9	69%	5	38%	2	15%	2	15%
Orange	21	13	62%	9	69%	5	38%	3	23%	3	23%
Rutland	19	4	21%	1	25%	0		1	25%	1	25%
Southeast	35	13	37%	4	31%	3	23%	5	38%	2	15%
Washington	20	10	50%	6	60%	2	20%	3	30%	2	20%

<sup>1</sup> Numbers for 'Schools Reporting non-CMHC Providers' are for those schools responding 'Yes' to receiving behavioral or mental health services from non-CMHC sources (n = 200 Table 3)

<sup>&</sup>lt;sup>2</sup> Numbers are based on those schools reporting and identifying specific services provided by non-CMHC personnel or groups.

<sup>&</sup>lt;sup>3</sup> Percents are based on the number of schools reporting non-CMHC services in total, by school type, or service area (n = 200, Table 3).

<sup>&</sup>lt;sup>4</sup> Numbers reflect the five most frequently reported services by those schools identifying specific services received from non-CMHC providers. Percents are based on the number of schools identifying non-CMHC services in total (n = 98), or by school type or service area.

Table 6
Most Commonly Identified Providers of non-CMHC Services
Received by Vermont Schools, 1996-97

	Schools		hools	Mo	st Commo	only Identifie	d Individ	uals Providi	ng non-C	MHC Serv	vices 4:
	Reporting non-CMHC	non-	tifying CMHC		rivate	Pri	vate	School	District	Р	rivate
	Providers <sup>1</sup>	Provi	ders <sup>2, 3</sup>	Psyc	hologist	Psych	niatrist	Emp	loyee	Th	erapist
<u>Total</u>	200	175	88%	128	73%	16	9%	15	9%	14	8%
School Type											
Elementary	146	126	86%	95	75%	13	10%	11	9%	9	7%
Middle	17	16	94%	13	81%	0		2	13%	3	19%
Secondary	30	27	90%	15	56%	2	7%	2	7%	2	7%
K-12	7	6	86%	5	83%	1	17%	0		0	
Service Area											
Addison	13	11	85%	9	82%	2	18%	1	9%	1	9%
Bennington	13	11	85%	7	64%	0		0		1	9%
Chittenden	30	28	93%	18	64%	3	11%	4	14%	2	7%
Franklin/Grand Isle	13	9	69%	7	78%	1	11%	0		0	
Lamoille	9	9	100%	8	89%	2	22%	0		2	22%
Northeast	27	25	93%	18	72%	0		6	24%	1	4%
Orange	21	19	90%	16	84%	0		0		1	5%
Rutland	19	16	84%	12	75%	3	19%	2	13%	1	6%
Southeast	35	29	83%	19	66%	3	10%	1	3%	4	14%
Washington	20	18	90%	14	78%	2	11%	1	6%	1	6%

<sup>&</sup>lt;sup>1</sup> Numbers for 'Schools Reporting non-CMHC Providers' are for those schools responding 'Yes' to receiving behavioral or mental health services from non-CMHC sources (Table 3).

<sup>&</sup>lt;sup>2</sup> Numbers are based on those schools reporting and identifying the non-CMHC service providers.

<sup>&</sup>lt;sup>3</sup> Percents are based on the number of schools reporting non-CMHC services in total, by school type, or service area (Table 3; n = 200).

<sup>&</sup>lt;sup>4</sup> Titles of most frequently reported providers of non-CMHC services. Percents are based on the number of schools identifying non-CMHC providers (n = 175).

Table 7
Satisfaction with Services Received from Community Mental Health Centers by Vermont Schools, 1996-97

	Responses to F		nools mendina				Satis	faction v	vith Specit	fic Servic	es Receiv	/ed <sup>1, 3</sup>			
	Recommend	CN	инс								/School		ase	Tes	ting &
	CMHC	Servi	ices 1, 2	Crisis	Service	Cons	ultation	Cou	ınseling	Coord	dination	Mana	gement	Eval	uation
Total	188	135	72%	125	78%	92	75%	79	81%	67	76%	63	72%	58	83%
School Type															
Elementary	133	96	72%	85	79%	63	72%	52	79%	49	77%	42	74%	45	87%
Middle	16	15	94%	13	81%	9	82%	8	73%	5	83%	8	80%	6	75%
Secondary	32	21	66%	23	74%	16	84%	16	89%	11	79%	11	73%	7	78%
K-12	7	3	43%	4	57%	4	80%	3	100%	2	50%	2	40%	0	
Service Area															
Addison	14	11	79%	10	83%	8	80%	2	50%	7	78%	6	75%	7	88%
Bennington	13	10	77%	13	100%	6	67%	5	56%	6	75%	3	75%	2	50%
Chittenden	24	18	75%	26	93%	7	78%	8	80%	9	75%	8	89%	2	67%
Franklin/Grand I	sle 18	13	72%	8	57%	7	78%	10	83%	7	78%	2	50%	6	100%
Lamoille	5	3	60%	3	60%	2	67%	3	100%	3	100%			3	100%
Northeast	31	21	68%	16	64%	18	67%	13	76%	10	71%	14	70%	12	86%
Orange	19	15	79%	8	80%	6	60%	7	88%	6	86%	5	50%	3	60%
Rutland	19	11	58%	11	69%	11	73%	4	80%	3	100%	5	71%	3	60%
Southeast	34	24	71%	20	74%	22	85%	22	88%	10	59%	16	76%	16	89%
Washington	11	9	82%	10	91%	5	100%	5	100%	6	100%	4	100%	4	100%

<sup>&</sup>lt;sup>1</sup> The numbers listed reflect schools reporting 'Yes, definitely' or 'Probably' to recommending their CMHC or as being 'satisfied' or 'very satisfied' with one or more of six specific services. The numbers reflect grouping in total, by school type, and by service area as well as for specific services.

Percents recommending CMHC services are based on the number of schools answering the question regarding CMHC recommendation (n = 188).

<sup>&</sup>lt;sup>3</sup> Percents for 'Satisfaction with Specific Services Received' are based on the number of schools receiving a specific service from their CMHC

Table 8
Services Wanted from Community Mental Health Centers
by Vermont Schools, 1996-97

Schools Receiving No CMHC Services

	Responding	Wa	anting				Spec	cific Ser	vices Wan	ted (All S	Schools) 1,	3			
	about Wanting		Type of								e/School	_	ase		ting &
	CMHC Services	CMHC S	Services 1,2	Crisis	Service	Cons	ultation	Cou	nseling	Coor	dination	Mana	gement	Eval	<u>uation</u>
<u>Total</u>	26	19	73%	32	63%	39	53%	47	50%	54	56%	34	37%	32	30%
School Type															
Elementary	21	16	76%	28	64%	28	55%	37	52%	41	61%	27	40%	21	28%
Middle	1	0		1	50%	3	50%	3	50%	5	56%	1	20%	2	22%
Secondary	3	2	67%	2	50%	5	38%	5	38%	5	29%	4	24%	4	24%
K-12	1	1	100%	1	100%	3	100%	2	50%	3	75%	2	67%	5	83%
Service Area															
Addison	0	0		0		0		3	33%	2	50%	1	14%	1	17%
Bennington	1	1	100%	2	100%	2	67%	5	100%	4	80%	1	17%	3	38%
Chittenden	5	4	80%	5	83%	10	63%	9	60%	8	53%	5	36%	5	28%
Franklin/Grand Isle	e 0	0		0		2	33%	1	25%	5	71%	3	38%	1	13%
Lamoille	3	3	100%	2	67%	4	100%	2	50%	3	100%	4	67%	2	40%
Northeast	4	2	50%	5	50%	7	70%	7	44%	11	58%	6	50%	10	56%
Orange	3	3	100%	6	75%	5	63%	5	71%	6	67%	4	50%	2	25%
Rutland	0	0		3	60%	1	50%	2	20%	3	27%	1	13%	1	17%
Southeast	5	2	40%	5	56%	4	36%	7	54%	7	47%	5	36%	4	21%
Washington	5	4	80%	4	80%	4	44%	6	55%	5	56%	4	40%	3	27%

<sup>1</sup> The numbers listed reflect schools reporting they 'probably' or 'definitely' would like to receive either some services or a specific service but currently do not receive any specific service(s).

<sup>&</sup>lt;sup>2</sup> Percents wanting some type of CMHC services are based on the number of schools that responded to the survey that currently receive no services of any kind but expressed an interest in receiving some type of service (n = 19) versus the number of schools receiving no services (n = 26). In order to be counted, a school was required to answer 'Yes' or 'No' to wanting any service(s). Schools were grouped either in total, by school type, or service area. The same criteria holds true for specific services.

<sup>&</sup>lt;sup>3</sup> Percents for 'Specific Services Wanted' are based on the number of schools not receiving a specific service from their CMHC but expressing an interest in receiving that specific service versus the total number of schools that do not receive that same service either in total, by school type, and by service area.

Table 9
Topics of Importance to School Personnel Regarding Community Mental Health Centers and Vermont Schools, 1996-97

	Respor	dents to				Gene	ral Topics	of Impo	rtance <sup>2</sup>			
	•	-ended		ability		ality	Fina	J		n/Setting		her
	Ques	tions <sup>1</sup>	of Se	rvices	of Se	rvices	of Se	rvices	of Se	rvices	Com	ments
<u>Total</u>	211	84%	190	75%	182	72%	54	21%	44	17%	49	19%
School Type												
Elementary	155	82%	142	76%	131	70%	44	23%	29	15%	36	19%
Middle	17	89%	16	84%	15	79%	3	16%	2	11%	3	16%
Secondary	32	89%	26	72%	29	81%	5	14%	12	33%	9	25%
K-12	8	89%	7	78%	8	89%	2	22%	1	11%	1	11%
Service Area												
Addison	15	94%	11	69%	15	94%	3	19%	1	6%	1	6%
Bennington	12	67%	12	67%	10	56%	2	11%	3	17%	4	22%
Chittenden	27	77%	26	74%	23	66%	9	26%	8	23%	9	26%
Franklin/Grand Is	il 18	100%	18	100%	15	83%	5	28%	5	28%	4	22%
Lamoille	9	100%	8	89%	8	89%	6	67%	0		2	22%
Northeast	38	88%	35	81%	34	79%	6	14%	3	7%	9	21%
Orange	20	91%	18	82%	18	82%	5	23%	6	27%	6	27%
Rutland	20	83%	17	71%	18	75%	6	25%	7	29%	5	21%
Southeast	38	86%	32	73%	29	66%	9	20%	9	20%	7	16%
Washington	15	65%	14	61%	13	57%	3	13%	2	9%	2	9%

<sup>&</sup>lt;sup>1</sup> Numbers for 'Respondents to Open-ended Questions' are based on any school that answered one or more of the four open-ended questions concerning likes and dislikes about CMHC services and those services currently or not currently provided that would be most valuable. Percents are based on all schools that responded to the surveyin total, by school type, and by service area (n = 252, Table 1).

<sup>&</sup>lt;sup>2</sup> Numbers for 'General Topics of Importance' are those schools mentioning the general topic as of some importance (either positive or negative) in the four open-ended questions. Percents are based on all schools that responded to the survey in total, by school type, and by service area (n = 252, Table 1).

Table 10

Likes and Dislikes of School Personnel Regarding Services of Community Mental Health Centers in Vermont Schools, 1996-97

	Ava	ilability	of Servi	ices 1	_	Qı	uality of	Servic	es <sup>1</sup>	Fii	nancing	of Serv	ices <sup>1</sup>	_		ocation c	of Servi	ces <sup>1</sup>
	L	ike	Dis	slike	_	Li	ike	Di	slike	L	ike	D	islike	_		ike	<u>D</u>	islike
<u>Total</u>	136	72%	131	69%	1	41	77%	115	63%	20	37%	28	52%		26	59%	16	36%
School Type																		
Elementary	99	70%	100	70%	1	01	77%	88	67%	17	39%	21	48%		17	59%	10	34%
Middle	12	75%	9	56%		11	73%	7	47%	2	67%	1	33%		0		2	100%
Secondary	20	77%	17	65%	2	22	76%	16	55%	1	20%	4	80%		8	67%	4	33%
K-12	6	86%	5	71%		7	88%	5	63%	0		2	100%		1	100%	0	
Service Area																		
Addison	5	45%	10	91%		12	80%	9	60%	1	33%	1	33%		1	100%	0	
Bennington	9	75%	10	83%		8	80%	8	80%	1	50%	1	50%		2	67%	1	33%
Chittenden	19	73%	17	65%		17	74%	14	61%	2	22%	8	89%		3	38%	5	63%
Franklin/Grand Isle	14	78%	11	61%		12	80%	11	73%	1	20%	2	40%		2	40%	2	40%
Lamoille	7	88%	6	75%		5	63%	3	38%	3	50%	3	50%		0		0	
Northeast	26	74%	25	71%	2	28	82%	25	74%	1	17%	4	67%		3	100%	0	
Orange	12	67%	12	67%		14	78%	12	67%	3	60%	1	20%		5	83%	1	17%
Rutland	13	76%	11	65%		11	61%	13	72%	2	33%	3	50%		3	43%	3	43%
Southeast	24	75%	19	59%	2	23	79%	15	52%	5	56%	3	33%		6	67%	3	33%
Washington	8	57%	10	71%		11	85%	6	46%	1	33%	2	67%		1	50%	1	50%

<sup>1</sup> Numbers for 'General Topics of Importance' are those schools mentioning the general topic as of some importance (either positive or negative) in the four open-ended questions. Percents are based on a schools that mentioned the general topic in total, by school type, and by service area (Table 9). Base numbers for percents vary as all topics were not mentioned by all respondents. An estimate of the number of schools considering each topic important may be calculated by dividing a total by its attendant decimal percent.

Table 11

Effect of Distance between Schools and Community Mental Health Centers
on Receipt of Mental Health Services, Desire for Services, and Satisfaction with Services
Vermont Schools, 1996-97

			Schools	Receivi	ng Menta	al Health	Servic	es 2				Schools N CMHC			Schools CMH	Recomi C Servi	-
Distance Between shool and CMHC 1	Number of Schools	Menta	iving Any al Health rvices		MHC ervices	Ī	chools Medic Fundii	aid		Pro	CMHC vider vices	lumber of Schools	С	anting MHC ervices	Number of Schools	С	nmending MHC ervices
Under 10 Miles	122	117	96%	107	88%	52	2 4	3%	9	7	80%	8	5	63%	94	65	69%
10-15 Miles	81	80	99%	68	84%	33	3 4	1%	6	9	85%	6	4	67%	61	43	70%
16-35 Miles	49	43	88%	34	69%	19	) 3	9%	3	4	69%	12	10	83%	33	27	82%
Total Schools	252	240	95%	209	83%	10	4 4	1%	2	00	79%	26	19	73%	188	135	72%
Probability	, 5	<=	=0.05	<:	=0.05					<=	0.10		<	=0.01			

 $<sup>^{1}\,</sup>$  Distances as reported are straight line distances,  $\underline{ie}.,$  'as the crow flies'.

<sup>&</sup>lt;sup>2</sup> Percents for 'Schools Receiving Mental Health Services' are based on the number of schools in each distance category and by total (n = 252).

<sup>&</sup>lt;sup>3</sup> Percents for 'Schools Not Receiving CMHC Services' are based on the attendant 'Number of Schools' column in each distance category and by total (n = 26).

<sup>&</sup>lt;sup>4</sup> Percents for 'Schools Recommending CMHC Services' are based on the attendant 'Number of Schools' column in each distance category and by total (n = 188).

<sup>&</sup>lt;sup>5</sup> 'Probability' is shown only for those columns with statistically significant differences.

Table 12
Effect of Per Pupil Expenditures on Receipt of Mental Health Services,
Desire for Services, and Satisfaction with Services
Vermont Schools, 1996-97

			Schools R	eceivin	g Mental	l Health S	ervices <sup>1</sup>			Schools N CMHC		•	Schools Re		•
Per Pupil Expenditures	Number of Schools	Menta	ving Any al Health rvices		MHC rvices	Ме	ools with dicaid inding	Pro	CMHC ovider vices	Number of Schools	(	anting CMHC ervices	Number of Schools	С	nmending MHC rvices
< \$4600	62	61	98%	54	87%	28	45%	53	85%	5	5	100%	50	35	70%
\$4600 - \$6000	130	125	96%	111	85%	55	42%	104	80%	9	7	78%	98	69	70%
> \$6000	56	50	89%	40	71%	20	36%	41	73%	10	5	50%	37	28	76%
Total Schools	248	236	95%	205	83%	103	42%	198	80%	24	17	71%	185	132	71%
Probabil	ity <sup>4</sup>	<=	-0.10	<=	0.05										

<sup>1</sup> Percents for 'Schools Receiving Mental Health Services' are based on the number of schools in each expenditure category and by total (n = 252).

<sup>&</sup>lt;sup>2</sup> Percents for 'Schools Not Receiving CMHC Services' are based on the attendant 'Number of Schools' column in each expenditure category and by total (n = 26).

<sup>&</sup>lt;sup>3</sup> Percents for 'Schools Recommending CMHC Services' are based on the attendant 'Number of Schools' column in each expenditure category and by total (n = 188).

<sup>&</sup>lt;sup>4</sup> 'Probability' is shown only for those columns with statistically significant differences.

#### APPENDIX 1

#### A NOTE ON STATISTICAL INTERPRETATION

Vermont is a small state with a small population. As a result, the state has a relatively small number of schools (329). Despite the comparatively high response rate to this survey (77%), many of the descriptive statistics (*i.e.*, percentages) were based on relatively small numbers. As an example, there are only fourteen K-12 schools statewide of which nine responded to the survey. Statistics is a discipline based on numerical data and assumptions about the population providing those numbers. As such, the larger the sample population, the more reliable the answers become, and the larger the response rate, the greater the confidence in the results.

Statistics based on small numbers and low response rates are notoriously unstable and should be interpreted with caution. This study has small numbers of responses, but a high overall response rate (77%). One method of determining the reliability of a measurement is to calculate confidence intervals. The narrower the confidence interval, the more confidence one may place in the answer. A widely used confidence interval is 95%, meaning the true answer is within those limits 19 out of 20 times. The table that follows presents 95% confidence intervals that include a finite population correction for selected numbers of responses given a 77% response rate.

Num	ber of Responses	Corrected Confidence Interval (77% response rate)
200	_	± 4%
188	(Elementary schools)	± 4%
150		± 4%
100		± 5%
50		± 7%
36	(Secondary schools)	± 9%
25		± 10%
19	(Middle schools)	± 12%
9	(K-12 schools)	± 16%
≤ 9		± 16%

As an example, 80% of the elementary schools (n = 150) and 95% of the middle schools (n = 18) reported receiving CMHC services (Table 3). In order to determine if the difference in the proportion of elementary and middle schools that receive any CMHC services is statistically significant, the following steps should be followed:

- 1. Select the category with the smallest total number of responding cases. Table 1 indicates that 19 middle schools and 188 elementary schools responded to the survey.
- 2. Find the confidence interval for that sample size in the table above. The 95% confidence interval for a sample of 19 is  $\pm$  12%.
- 3. Compare the limits of the confidence interval for the smaller category to the proportion reported for the larger category. In this case,  $95\%\pm12\%$  of the middle schools received CMHC services. The lower limit for the corrected 95% confidence interval is 83% (95% 12% = 83%) which is greater than the 80% of elementary schools that receive CMHC services.

Therefore, since the two confidence intervals do not overlap, the difference between the proportions of elementary and middle schools that reported receiving any CMHC services is statistically

#### significant.

Another example from Table 3 using elementary and middle schools once again further serves to illustrate the process. Mental health services from non-CMHC providers were reported by 78% of the elementary schools and 89% of the middle schools. The sample size and corrected 95% confidence interval remain the same for the middle schools (19 responding schools and  $\pm$  12%). The lower limit becomes 77% (89% - 12% = 77%) which is less than the 78% of elementary schools that reported other provider services. In this example, the proportion of elementary schools that reported receiving mental health services from non-CMHC providers falls within the confidence interval for middle schools. Therefore, there is no statistically valid difference between the rates of middle and elementary schools that reported non-CMHC services.

#### **APPENDIX 2**

#### **TECHNICAL SPECIFICATIONS**

The information used as the basis of this report was derived from responses to the *Mental Health Services in Vermont Schools*, 1996-1997 questionnaire. The survey was mailed to all Vermont school principals with the initial mailing in early January 1997 and a second, follow-up mailing to nonrespondents in late February. The mailing list for school principals was obtained from the Vermont State Department of Education.

#### **OVERALL SPECIFICATIONS**

The information in each table presents the findings for the state of Vermont as a whole, for the schools by school type (i.e., by grade level), and by catchment area. Catchment area is a geographic description of the ten Vermont community mental health service areas.

Schools were classified into four categories according to grade level. The four school categories and corresponding grade levels were defined as follows:

- Elementary schools served children from kindergarten up through eighth grade or any school that served children in grades no higher than sixth;
- Middle schools included 4<sup>th</sup>-8<sup>th</sup>, 5<sup>th</sup>-8<sup>th</sup>, 6<sup>th</sup>-8<sup>th</sup>, or 7<sup>th</sup>-8<sup>th</sup> graded schools;
- Secondary schools included those serving 6<sup>th</sup>-12<sup>th</sup>, 7<sup>th</sup>-12<sup>th</sup>, 8<sup>th</sup>-12<sup>th</sup>, or 9<sup>th</sup>-12<sup>th</sup> grades; and
- K-12 schools were those schools serving kindergarten through twelfth grades.

Also included in the count were several nontraditional educational institutions - OnTop, Early Essential Education, and Woodside Correctional Facility. The total number of Vermont schools has decreased from 336 to 329 due to a number of school consolidations since the previous report (*Vermont Public School and Community Mental Health Service Integration, Satisfaction, and Needs Assessment: 1993-94*).

Schools were also grouped into service areas that corresponded to those areas served by Vermont's ten community mental health centers. Service areas were defined as follows:

- 'Addison' included Addison County less the towns of Granville and Hancock;
- 'Bennington' included all of Bennington County;
- 'Chittenden' included all of Chittenden County;
- 'Franklin/Grand Isle' included all of Franklin and Grand Isle counties;
- 'Lamoille' included all of Lamoille County;
- 'Northeast' included Caledonia, Essex, and Orleans counties;
- 'Orange' included all of Orange County plus the Addison County towns of Granville and Hancock as well as the towns of Bethel, Rochester, Royalton, Sharon, and Stockbridge in Windsor County;
- 'Rutland' included all of Rutland County;
- 'Southeast' included all of Windham and Windsor counties less the Windsor County towns of Bethel, Rochester, Royalton, Sharon, and Stockbridge; and
- · 'Washington' included all of Washington County.

#### DUPLICATE SURVEYS

Multiple surveys were received from three schools. Responses were compiled for each school when more than one survey was returned by comparing responses to each question. When a discrepancy was noted regarding service provision, the questionnaire was coded to indicate that the specific service was provided as it was assumed more likely for a service to be received without all school personnel being aware of it than for a staff member to believe the service was provided when in reality it was not. The same logic was applied to other factual questions throughout the survey. Responses regarding individual judgements (*i.e.*, satisfaction with specific services, CMHC recommendation, etc.) were combined and an averaged value was recorded. All answers for open ended questions on duplicate surveys were included in the analysis.

#### TABLE 1: Responses to the 1996-97 Study of Mental Health Services in Vermont Schools

Table 1 reports the total number of schools (329) in Vermont and those that returned completed surveys. The total number of schools differs from the 1993-94 total (336 schools), reflecting school closings and consolidations throughout the state. Also included in the total are nontraditional educational settings such as OnTop, Early Essential Education, and Woodside Correctional Facility. 'Response Rate' was determined by the number of questionnaires returned as a percentage of the number of schools in Vermont.

School personnel completing the survey were requested to provide their title. In many cases, more than one individual was identified as completing the survey. The category 'Personnel Involved in Completing Questionnaires' is a compilation of individuals identified as completing or assisting in the completion of the questionnaire. Percents shown for each title category are based on all returned questionnaires (n = 252). Therefore, total percents for the personnel exceed one hundred percent.

School personnel listed as assistant principals were counted under 'Principal'. The category 'Other' included school nurses, teachers, and other school personnel not classified within the other three categories.

### TABLE 2: Treated Prevalence of an Emotional or Behavioral Disorder in Vermont Schools

Table 2 reports responses to questions regarding instructional support for students diagnosed with emotional and behavioral disorders (EBD) and those students known to use Ritalin. In order to be included in Table 2, schools were required to supply answers to both questions regarding EBD students as well as a school enrollment figure. The two EBD questions requested the number of students on an individualized education plan (IEP) for EBD and those receiving instructional support for EBD but who were not on an IEP for EBD. One school answered the two EBD questions but neglected to provide enrollment data. Vermont Department of Education data was used to provide an enrollment figure for this school.

The total number of students reported receiving any EBD services (either IEP or non-IEP) was tabulated to provide an overall indication of the prevalence of EBD. These data were further subdivided into students on an IEP associated with EBD and those students receiving instructional support but not on an EBD based IEP. Percents in all three cases were based on the total student population as reported by the responding schools. Percents for the category 'Students Known to Take Ritalin' were based on the total population of schools responding to the question. Ritalin (methylphenidate) is a stimulant drug that has a calming effect in patients with attention deficit/hyperactivity disorder (ADHD). The disorder is sometimes diagnosed in children who have difficulty focusing on certain tasks or who are unable to filter out distractions that prevent the

completion of those tasks, and who may exhibit inappropriate, impulsive behavior. Hyperactivity may also be associated with the disorder in some children. Ritalin treatment may improve certain behaviors in such children, including inactiveness, hyperactivity, and impulsive behavior.

#### TABLE 3: Source of Mental Health Services in Vermont Schools

Table 3 categorizes the source of mental health services schools received. The category 'Receiving Any Mental Health Services' includes those schools receiving mental health services from a CMHC and/or a non-CMHC provider. Percents were based on the number of schools responding to the survey (n = 252, Table 1).

Schools receiving CMHC services were categorized under 'CMHC Services' if they responded 'Yes' to either a contractual or noncontractual relationship with their local CMHC. Schools receiving any CMHC services were further subdivided to identify the number of schools having noncontractual relationships with their CMHC versus those having contractual relationships that provided Medicaid services. In all three categories, percents were based on the number of schools responding to the survey.

'Non-CMHC Provider Services' included schools receiving mental health services from a non-CMHC provider, regardless of whether or not the schools received CMHC provided services. Those schools receiving mental health services from both CMHC and non-CMHC providers are reported in the category 'CMHC and non-CMHC Provider Services'. Percents in both cases were again based on the number of schools responding to the survey.

#### TABLE 4: Services Received from Community Mental Health Centers by Vermont Schools

Table 4 reports on schools receiving CMHC services in two manners. First, schools receiving any CMHC service were counted in the category 'Receiving Any CMHC Services'. A school was counted as receiving CMHC services if responding 'Yes' to receiving any of the six specific services listed on the survey or if responding 'Yes' to any other CMHC provided service(s). Percents were based on the total number of schools responding to the survey as specified in Table 1 (n = 252).

The second manner of reporting schools that received CMHC services was by asking if any of six specific services were received by the school. Totals for the number of schools that received each specific service are listed. Percents were based on the total number of schools receiving any CMHC provided services as described in the previous paragraph (n = 208).

#### TABLE 5: Services Received from Other Providers by Vermont Schools

Table 5 identifies mental health services most commonly reported by schools as being provided by non-CMHC personnel. 'Schools Identifying non-CMHC Services' reports those schools identifying at least one specific non-CMHC provided service. Percents were based on numbers reported in Table 3 (n = 200).

Schools often reported receiving more than one service from non-CMHC personnel. The four non-CMHC provided services most commonly reported are listed. Percents were based on the number of schools identifying specific non-CMHC provided services (n = 98).

#### TABLE 6: Most Commonly Identified Providers of non-CMHC Services Received by Vermont Schools

Table 6 provides more detail on the professionals who provide non-CMHC services. 'Schools Identifying non-CMHC Providers' includes schools that identified at least one specific provider of non-CMHC mental health services. Percents were based on the number of schools that reported receipt of non-CMHC mental health services (n = 200, Table 3).

Oftentimes, schools reported more than one type of provider for non-CMHC mental health services. The four most commonly reported titles of non-CMHC personnel providing mental health services are reported. Percents for those categories were based on the number of schools identifying their non-CMHC provider(s) (n = 175).

#### TABLE 7: Satisfaction with Services Received from Community Mental Health Centers by Vermont Schools

Table 7 groups answers to the question "Would you recommend community mental health services to another school in your district?" into two categories. Schools responding 'Yes, definitely' or 'Probably' were counted as recommending CMHC services while those schools responding 'Maybe', 'Probably not', or 'Definitely not' were counted as not recommending CMHC services. Those schools with a favorable view of CMHC services are totaled in 'Schools Recommending CMHC Services'. Percents were based on the total number of schools responding to the recommendation question.

Rates of satisfaction with six specific CMHC services were determined in the same manner as described in the previous paragraph. In order to be counted for a specific service, a school needed to answer the question regarding satisfaction with that service. Schools responding 'Very satisfied' or 'Satisfied' to a specific service were counted as being satisfied with that specific service. Schools responding as 'Undecided', 'Unsatisfied', or 'Very unsatisfied' were counted as not being satisfied with a service. Percent satisfied for the six specific services was based on the number of schools answering the question regarding satisfaction for each specific service. As not all schools received each service or did not answer the satisfaction question, base numbers for percents vary between the six specific services. An estimation of the number of schools responding to satisfaction level with any specific service may be determined by dividing the total number by its attendant decimal percent.

### TABLE 8: Services Wanted from Community Mental Health Centers by Vermont Schools, 1996-97

Table 8 describes schools that reported they received no CMHC services of any kind but that also reported wanting one or more specific services. Eighteen schools currently not receiving CMHC provided services did not respond to any of the questions about wanting a specific service or services and were therefore excluded from Table 8. Also reported in Table 8 are those schools that received no CMHC services but expressed a desire for some type of CMHC service. Furthermore, Table 8 also includes schools not receiving a specific CMHC provided service identified on the survey but wanting that same service.

In order to be counted for Table 8, a school had to report receiving no CMHC services of any kind as well as answering one or more questions about wanting services. Schools satisfying these criteria are reported in the column 'No CMHC Services but Responding about Wanting CMHC Services'. Schools that currently receive no services but answered 'Yes, definitely' or 'Probably' to wanting a specific service or services were counted as wanting a service while replies of 'Maybe', 'Probably not', or 'Definitely not' were counted as not wanting a service. Schools that responded in the affirmative to any service are reported in 'Schools Wanting Some Type of CMHC Services'. Percents are based on those schools receiving no services and answering one of the wanting service questions as

previously described (n = 26).

Totals for specific services were based on those schools that currently do not receive a service but answered the specific 'Want service' question. Percents are based on the number of schools answering the question regarding wanting a specific service. As different schools received different services, base numbers for percents vary between the six specific services. An estimation of the number of schools responding to wanting a specific service may be determined by dividing the total number by its attendant decimal percent.

### TABLE 9: Topics of Importance to School Personnel Regarding Community Mental Health Centers and Vermont Schools, 1996-97

Table 9 presents the total number of schools responding to one or more of the open-ended questions as well as a compilation of the questions reduced to four broad categories and one 'Other Comments' catchall category. 'Respondents to Open-ended Questions' is the total of schools responding to one or more of the questions. Percents were based on the number of schools responding to the survey (n = 252, Table 1).

When responses to the open-ended questions were read, it became apparent that four broad areas of concern encompassed most of the replies. The four areas of importance are as follows:

- availability of services;
- quality of services;
- financing of services; and
- location/setting of services.

Answers were coded into one of the four main categories or were categorized as 'Other Comments' if the reply did not readily fit into one of the main categories. Oftentimes, answers were worded so as to fit two categories. When this occurred, both categories were marked. Totals represent the number of times the broad issue was mentioned by all schools answering an open-ended question. Percents were based on the number of schools responding to the survey (n = 252).

### TABLE 10: Likes and Dislikes of School Personnel Regarding Services of Community Mental Health Centers in Vermont Schools

Table 10 shows the frequency with which each of the four topics of importance in Table 9 was mentioned by school personnel in either a positive or negative manner. Percents were based on the frequency with which each topic had been mentioned in the open-ended questions (Table 9). Oftentimes, the same topic was mentioned in both a positive and negative light in the same comment and/or by the same school. As such, the totals of the 'Like' and 'Dislike' columns for any one topic of importance do not necessarily correspond to the total shown in Table 9.

# TABLE 11: Effect of Distance between Schools and Community Mental Health Centers on Receipt of Mental Health Services, Desire for Services, and Satisfaction with Services

Table 11 presents information on the effect of the distance (as a straight line) between a school and its local community mental health center and the likelihood schools will receive mental health services, their desire for services, and their satisfaction with services. Distances were computed using the zip codes of individual schools and the community mental health centers. A computer program determined the centroid of each zip code area (*i.e.*, the geographical center) in terms of

latitude and longitude. This information was used to calculate the straight line distance between any two zip codes. Schools were then categorized by their distance from their respective CMHC.

When determining distances between schools and a CMHC, the Northeast and Southeast service areas were further subdivided into the actual centers that served individual schools. The Northeast was subdivided into Newport, St. Johnsbury and Canaan service areas. The town of Canaan in Essex County has its own center in the school and serves only that school. The Southeast service area was subdivided into Brattleboro, Springfield, and White River Junction service areas.

The probabilities shown in Table 11 are based on an Analysis of Variance (ANOVA) and indicate the likelihood that observed differences in responses categorized by distances are real. As an example, schools 16-35 miles from a CMHC reported receiving mental health services from any provider 88% of the time as opposed to a 96% service rate for schools closer than 10 miles and a 99% service rate for those schools 10-15 miles from a CMHC. The probability of this being an actual difference in mental health service rate is less than or equal to 0.05, indicating that the observed results would occur by chance no more often than five out of one hundred times.

### TABLE 12: Effect of Per Pupil Expenditures on Receipt of Mental Health Services, Desire for Services, and Satisfaction with Services

Table 12 presents the same information on the likelihood schools will receive mental health services, their desire for services, and their satisfaction with services but based on the per pupil expenditures of a school as reported by the Vermont Department of Education for the 1995-96 school year (*Net Cost Per Pupil – 96; 1995-96 School Year*). The data were presented by the Department of Education as elementary (PK-6<sup>th</sup> grade) and secondary (7<sup>th</sup>–12<sup>th</sup> grade) costs for each local education authority (*i.e.*, town). Weighted averages based on student populations were used to more accurately represent costs associated with K-12, K-8, and middle schools.

As in Table 11, the probabilities shown in Table 12 are based on an Analysis of Variance (ANOVA) and indicate the likelihood that observed differences in responses categorized by per pupil expenditures are real. Again, a probability less than or equal to 0.05 indicates that the observed results would occur by chance no more often than five out of one hundred times.

# APPENDIX 3 COVER LETTERS AND QUESTIONNAIRE

#### State of Vermont

DEPARTMENT OF EDUCATION 120 State Street Montpelier, Vermont 05620-2501

Telephone: (802) 828-3135 Fax: (802) 828-3140



AGENCY OF HUMAN SERVICES 103 South Main Street Waterbury, Vermont 05671-0204

Telephone: (802) 241-2220 Fax: (802) 241-2979

#### AHS/Education Collaboration

Vermont School Principals TO:

FROM:

Marc Hull, Commissioner of Education Marc Hull, Commissioner of Education Marc Human Services

DATE January 9, 1997

RE: Mental Health Services Evaluation

Please help us evaluate our provision of mental health services through schools in Vermiont and to plan for the future by asking one person on your staff to complete the enclosed questionnaire.

The questionnaire asks about your current relationship with the mental health center, your satisfaction with the services you receive, and your desires for the future. Please ask the person at your school who knows the most about your relationship with community mental health to complete the school questionnaire.

Please return the completed questionnaire in the enclosed self-addressed, stamped envelope as soon as possible. We would like to have the completed questionnaire returned by February 15, so we can analyze the data and share our findings with policy makers and participating schools by the end of the school year

The questionnaire includes a mailing label that identifies your school. This information will be used for purposes of statistical analysis only (e.g., assessing the impact of school and community characteristics). Your specific responses will be treated as confidential information.

Thank you for your help in evaluating this important policy initiative. If you have any questions about this questionnaire, please call Pat LaRock in the Research and Statistics Unit at the Department of Developmental and Mental Health Services (802-241-2639).

Enclosure

Commissioner's Office Legal Division Division of Mental Health 241-2610 241-2602 241-2604 (Voice/TDD)



Vermont State Hospital Division of Mental Retardation Fax Number 241-10 -941-26) i 241-3002

#### State of Vermont

## Agency of Human Services Department of Mental Health and Mental Retardation 103 South Main Street Waterbury, Verment 05671-1601

Pebruary 28, 1997

Dear Principal:

A few weeks ago, we sent a questionnaire to your school asking for help evaluating mental health services in your school. We are interested in hearing from schools that do not receive services from community mental health centers as well as from those who do.

As of this writing, we have not received a response from your school.

We would very much appreciate a few minutes of your time or the 'time of a knowledgeable staff person to complete and return the questionnaire. For your convenience, I have enclosed a second copy of the questionnaire.

I thank you in advance for any help you can give.

If you have any questions, please feel free to call me or Pat LaRock [802-241-2639].

Sincerely,

John A. Pandiani, Ph.D. Chief of Research & Statistics

JAP/psm

Enclosure

#### Vermont Public School and Community Mental Health Service Integration, Satisfaction, and Needs Assessment 1996-1997

Please help us evaluate our provision of mental health services through schools in Vermont by answering the following questions. If the questions or responses do not adequately express your feelings or your situation, please feel free to write your comments at any point. If you have any questions, please call Pat LaRock in the Research and Statistics Unit at the Department of Developmental and Mental Health Services (1-802-241-2639).

#### I. Current and Needed Services

For each of the services below, please tell us:

- 1. Do you currently receive this service from your local community mental health center?
- 2. If you do, how satisfied are you with the services you receive?
- 3. Would you like to receive, or continue to receive, this service in the future?

Testing &	Currently Receive?	Yes No			
Evaluation	How Satisfied?	Very Satisfied	Satisfied Undecid	ed Unswisfied	Very Unsatisfied
	Want to Receive?	Yes Definitely	Probably Maybo	Probably Not	Definitely Not
Counseling	Currently Receive?	Yes No			
(In School)	How Satisfied?	Very Satisfied	Satisfied Undecid	ed Unsatisfied	Very Unsatisfied
	Want to Receive?	Yes Definitely	Probably Mayb	e Probably Not	Definitely Not
Case	Currently Receive?	Yes No			
Management	How Satisfied?	Very Satisfied	Satisfied Undecid	ed Unsatisfied	Very Unsatisfied
	Want to Receive?	Yes Definitely	Probably Mayb	e Probably Not	Definitely Not
Consultation	Currently Receive?	Yes No			
	How Satisfied?	Very Satisfied	Satisfied Undecid	nd Unsatisfied	Very Unsatisfied
	Want to Receive?	Yes Definisely	Probably Mayb	Probably Not	Definitely Not
Crisis	Currently Receive?	Yes No			
Services	How Satisfied?	Very Satisfied	Satisfied Undecide	ed Unsatisfied	Very Unsatisfied
	Wars to Receive?	Yes Definitely	Probably Maybe	Probably Not	Definitely Not
Home/School	Currently Receive?	Yes No			
Coordination	How Satisfied?	Very Satisfied	Satisfied Undecide	d Unsatisfied	Very Unsatisfied
	Want to Receive?	Yes Definitely	Probably Maybe	Probably Not	Definitely Not
Other	Currently Receive?	Yes No	Please specify type:		
	How Satisfied?	Very Satisfied	Satisfied Underick	d Unsatisfied	Very Unsatisfied
	Want to Receive?	Yes Definitely	Probably Maybe	Probably Not	Definitely Not

114	Reta	cionsnif	with community in	iental health ce	enter		
Does	s your sch	ool curre	ently have a contractual	relationship with	your local community me	ntal hea	ith center
	Yes	No					
	If yes	, does th	is contract include	Medicaid Ser Non-Medicai		Yes Yes	No No
	Appro	ximately	y how many hours of se	ervice are provid	ed under this contract each	week?	-
	Appro	ximately	how many children w	rill be served und	er this contract this year?		
Does	your sch	ool have	an informal relationsh	ip with your loca	d community mental healt	h cente	r?
	Yes	No	If yes, please describe	e briefly:			
	Appro	ximately	how many children wil	ll be served under	r this informal relationship	this ye	ar?
Ш.	Overs	di Evab	uation and Needs				
Would	d you rec	ommend	community mental he	alth services to a	nother school in your distr	rict?	
	Yes De	finitely	Probably	Maybe	Probably Not	Defin	nitely Not
What	three thin	igs do ye	u like most about the o	community ment	al health services?		
1.							
2.							
3.							
What,	if anythir	ng, do yo	ou dislike about the con	nmunity mental f	nealth services?		
1.							
2.							
3.							
What ti	hree servi	ices that	are not currently provi	ded would be mo	st valuable to your school	7	
1.							
2.							
3.							
What th	ree servi	ces that a	are currently provided	are most valuable	e to your school?		
I,							
2.							
3.							

Other Mental Health Services:
ir school receive behavioral or mental health services from people not affiliated with your local
ty mental health center? Yes No
September 2014 September 2014 Contract
ase specify the type(s) of service and the name of the agency or type of provider (e.g., community nics, private psychologist, etc.)
eneral Information;
children are currently enrolled in your school?
and the content of th
of your students are on an IEP for an emotional or behavioral disorder?
y of your students who are not on an IEP for an emotional or behavioral disorder receive
al support because of an emotional or behavioral disorder?
of your students use Ritalin?
or your state its use (statin)
of your students use other psychiatric medication?
ify types:
any other comments that would help us evaluate the provision of mental health services through
fermont, or to plan for future services in this area, please use the back of this page.
nnaire was completed by:
cator
punselor
e specify)
at other second
200 (200 0 000)
responses will be treated as confidential. We are asking you to identify your specific school for purposes of its of the impact of school characteristics such as location, size, and grade level, as well as community characteristics